

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

VIA ELECTRONIC MAIL DELIVERY RECEIPT REQUESTED

Jeff Bumgarner La Salle City Water Works J.Bumgarner@LaSalle-IL.gov

Re: Finding of Violation

La Salle City Water Works

La Salle, Illinois

Dear Mr. Bumgarner:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to La Salle City Water Works ("La Salle" or "you") under Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3). We find that you are violating certain provisions of the Chemical Accident Prevention Provisions (CAPP), codified at 40 C.F.R. Part 68, as well as Section 112(r)(7)(E) of the Clean Air Act, 42 U.S.C. § 7412(r)(7)(E), at your La Salle, Illinois facility.

Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7412(a)(3), gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to participate in the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Vicky Mei. You may call them at (312) 353-2054 or email them at Mei.Vicky@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Ethan Chatfield

Acting Chief, Air Enforcement and Compliance Assurance Section (IL/IN)

Enclosure

cc: Kent Mohr, Manager, IEPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)	
)	
La Salle City Water Works) FINDING OF VI	OLATION
La Salle, Illinois)	
) EPA-5-21-IL-08	
Proceedings Pursuant to)	
the Clean Air Act,)	
42 U.S.C. §§ 7401 et seq.)	
)	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that La Salle City Water Works ("La Salle") is violating Section 112(r)(7)(E) of the Clean Air Act (Act), 42 U.S.C. § 7412(r)(7)(E), and certain regulatory provisions set forth in the Chemical Accident Prevention Provisions (CAPP), codified at 40 C.F.R. Part 68. The statutory and regulatory authority, as well as a description of the specific violations, are set forth below:

Statutory and Regulatory Authority

A. Clean Air Act, Subsection 112(r)

- 1. Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1), provides that it shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to Section 112(r)(3), or any other extremely hazardous substance.
- 2. Section 112(r)(3) of the Act, 42 U.S.C. § 7412(r)(3), provides that the Administrator shall promulgate, not later than 24 months after November 15, 1990, an initial list of 100 substances which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment.
- 3. Section 112(r)(7)(A) of the Act, 42 U.S.C. § 7412(r)(7)(A), provides that in order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements.
- 4. Section 112(r)(7)(B)(i) of the Act, 42 U.S.C. § 7412(r)(7)(B)(i), provides that within 3 years after November 15, 1990, the Administrator shall promulgate reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases.

- 5. Section 112(r)(7)(B)(ii) of the Act, 42 U.S.C. § 7412(r)(7)(B)(ii), provides that the regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a Risk Management Plan (RMP) to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment.
- 6. Pursuant to Section 112(r) of the Act, 42 U.S.C. § 7412(r), the Administrator initially promulgated a list of regulated substances, with threshold quantities for applicability, at 59 Fed. Reg. 4478 (January 31, 1994), which is codified, as amended, at 40 C.F.R. § 68.130.
- 7. Pursuant to Section 112(r) of the Act, 42 U.S.C. § 7412(r), the Administrator promulgated "Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Act Section 112(r)(7)," 61 Fed. Reg. 31668 (June 20, 1996), which is codified, as amended, at 40 C.F.R. Part 68: Chemical Accident Prevention Provisions. *See* Fed. Reg. 69834 (Dec. 19, 2019).
- 8. Section 112(r)(7)(E) of the Act, 42 U.S.C. § 7412(r)(7)(E), provides that after the effective date of any regulation or requirement promulgated pursuant to Section 112(r) of the Act, it shall be unlawful for any person to operate any stationary source in violation of such regulation or requirement.

B. Chemical Accident Prevention Provisions

a. Applicability

- 9. Section 68.10(a) of CAPP provides, in pertinent part, that the owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 C.F.R. § 68.115, shall comply with the requirements of CAPP no later than the date on which a regulated substance is first present above a threshold quantity in a process.
- 10. Section 68.3 of CAPP provides that "regulated substance" means any substance listed pursuant to Section 112(r)(3) of the Act at 40 C.F.R. § 68.130.
- 11. Table 1 at Section 68.130(a) of CAPP lists chlorine as a regulated toxic substance with a threshold quantity of 2,500 pounds.
- 12. Section 68.3 of CAPP provides that "process" means "any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities." For purposes of this definition, a single process includes "any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release" A "covered process" means "a process that has a regulated substance present in more than a threshold quantity as determined under 40 C.F.R. § 68.115."
- 13. Section 68.10(i) of CAPP provides, in pertinent part, that a covered process is subject to Program 3 requirements if the process does not meet the requirements of 40 C.F.R. § 68.10(g) and if either of the following conditions is met: the process is in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532; or the process is subject to the U.S. Occupational Safety and Health Administration (OSHA) process safety management standard, 29 CFR § 1910.119.

14. Section 68.12(a) and (d) of CAPP identify CAPP requirements that the owner or operator of a stationary source with a process subject to Program 3 shall meet, which include, among other provisions, requirements regarding hazard assessment, the Program 3 prevention program, and the submittal of an updated RMP.

b. Hazard Assessment

- 15. Section 68.30(a-d) of CAPP provides that the owner or operator shall estimate to two significant digits, in the RMP, the residential population potentially affected by the offsite impacts, (per the definition in §§ 68.22(a) and 68.30(a)), using the most recent Census data, or other updated information, and noting the presence of institutions, parks and recreational areas, and major commercial, office, and industrial building.
- 16. Section 68.33(a-b) of CAPP provides that the owner or operator shall list the RMP environmental receptors (per the definition in §§ 68.22(a) and 68.33(a)), relying on information provided on local U.S. Geological Survey maps or on any data source containing U.S.G.S. data to identify environmental receptors.
- 17. Section 68.36(a) of CAPP provides that the owner or operator shall review and update the offsite consequence analyses at least once every five years.
- 18. Section 68.39 of CAPP provides, in pertinent part, that the owner or operator shall maintain, for the offsite consequence analyses:
 - a. For worst-case scenarios and alternative release scenarios, a description of the vessel or pipeline and substance identified, assumptions and parameters used, and the rationale for the selection of the scenarios, as well as the anticipated effect of the controls and mitigation on the release quantity and rate (Section 68.39(a-b));
 - b. Documentation of estimated quantity released, release rate, and duration of release (Section 68.39(c));
 - c. Methodology used to determine distance to endpoints (Section 68.39(d)); and
 - d. Data used to estimate population and environmental receptors potentially affected (Section 68.39(e)).

c. Process Safety Information

- 19. Section 68.65 of CAPP provides, in pertinent part, that before conducting any process hazard analysis required by CAPP, the owner or operator of a stationary source with a process subject to Program 3 shall complete a compilation of written process safety information pertaining to the hazards of the regulated substances, the technology of the process and the equipment in the process, including at least the following:
 - a. Section 68.65(c)(1) of CAPP:
 - i. A block flow diagram or simplified process flow diagram (Section 68.65(c)(1)(i));
 - ii. Safe upper and lower limits for such items as temperatures, pressures, flows or compositions (Section 68.65(c)(1)(iv)); and

- iii. An evaluation of the consequences of deviations. (Section 68.65(c)(1)(v)).
- b. Section 68.65(d)(1) of CAPP:
 - i. Materials of construction (Section 68.65(d)(1)(i));
 - ii. Piping and instrument diagrams (P&ID's) (Section 68.65(d)(1)(ii));
 - iii. Electrical classification (Section 68.65(d)(1)(iii));
 - iv. Relief system design and design basis (Section 68.65(d)(1)(iv));
 - v. Ventilation system design (Section 68.65(d)(1)(v));
 - vi. Design codes and standards employed (Section 68.65(d)(1)(vi)); and
 - vii. Safety systems (e.g. interlocks, detection or suppression systems) (Section 68.65(d)(1)(viii)).
- c. Section 68.65(d)(2) of CAPP provides that the owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

d. Process Hazard Analysis

- 20. Section 68.67 of CAPP provides, in pertinent part, that the owner or operator of a stationary source with a process subject to Program 3 shall:
 - a. Perform an initial process hazard analysis appropriate to the complexity of the process; identify, evaluate, and control the hazards involved in the process; and document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. These process hazard analyses shall be updated and revalidated, based on their completion date (Section 68.67(a));
 - b. Use one or more of the methodologies, listed in § 68.67(b)(1-7), that are appropriate to determine and evaluate the hazards of the process being analyzed (Section 68.67(b));
 - c. Address, in the process hazard analysis, the hazards of the process; the identification of any previous incident which had a likely potential for catastrophic consequences; engineering and administrative controls applicable to the hazards and their interrelationships; the consequences of failure of engineering and administrative controls; stationary source siting; human factors; and a qualitative evaluation of a range of the possible safety and health effects of failure of controls (Section 68.67(c)(1-7));
 - d. Have the process hazard analysis be performed by a team with expertise in engineering and process operations, experience and knowledge specific to the process being evaluated, and knowledge in the specific process hazard analysis methodology being used (Section 68.67(d)); and

- e. Establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions (Section 68.67(e));
- f. At least every five (5) years after the completion of the initial process hazard analysis, have the process hazard analysis be updated and revalidated by a team meeting the requirements in § 68.67(d), to assure that the process hazard analysis is consistent with the current process (Section 68.67(f)); and
- g. Retain process hazards analyses and updates or revalidations for each process subject to Program 3, as well as the documented resolution of recommendations described in § 68.67(e) for the life of the process. (Section 68.67(g))

e. Operating Procedures

- 21. Section 68.69(a) of CAPP provides, in pertinent part, among other provisions, that the owner or operator of a stationary source with a process subject to Program 3 shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with process safety information and that address the elements in §§ 68.69(a)(1)(iv-vii) and 68.69(a)(2-4).
- 22. Section 68.69(c) of CAPP provides that the operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.

f. Training

- 23. Section 68.71(a)(1) of CAPP provides that each employee involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in 40 C.F.R. § 68.69. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.
- 24. Section 68.71(b) of CAPP provides that refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.
- 25. Section 68.71(c) of CAPP provides that the owner or operator shall ascertain, verify, and record that each employee involved in operating a process has received and understood the training required by Section 68.71 of CAPP.

g. Mechanical Integrity

- 26. Section 68.73(b) of CAPP provides that the owner or operator of a stationary source with a process subject to Program 3 shall establish and implement written procedures to maintain the ongoing integrity of process equipment, as identified at 40 C.F.R. § 68.73(a).
- 27. Section 68.73(c) of CAPP provides that the owner or operator of a stationary source with processes subject to Program 3 shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.
- 28. Section 68.73(d)(1-4) of CAPP provides that inspections and tests shall be performed on process equipment; follow recognized and generally accepted good engineering practices; conducted at a frequency consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience; and documented.

h. Compliance Audits

- 29. Section 68.79(a) of CAPP provides that the owner or operator of a stationary source with a process subject to Program 3 shall certify that they have evaluated compliance with the provisions of 40 C.F.R. Part 68, Subpart D, Program 3 Prevention Program, at least every three years to verify that procedures and practices developed under Subpart D, referenced above, are adequate and are being followed.
- 30. Section 68.79(b) of CAPP provides that the compliance audit shall be conducted by at least one person knowledgeable in the process.
- 31. Section 68.79(c) of CAPP provides that a report of the findings of the audit shall be developed.
- 32. Section 68.79(d) of CAPP provides that the owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.
- 33. Section 68.79(e) of CAPP provides that the owner or operator shall retain the two (2) most recent compliance audit reports.

i. Employee Participation

- 34. Section 68.83(a) of CAPP provides that the owner or operator of a stationary source with a process subject to Program 3 shall develop a written plan of action regarding the implementation of the employee participation required by Section 68.83 of CAPP.
- 35. Section 68.83(b) of CAPP provides that the owner or operator shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management required by CAPP.
- 36. Section 68.83(c) of CAPP provides that the owner or operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under CAPP.

j. RMP Updates

37. Section 68.190(a) of CAPP provides that the owner or operator shall review and update the RMP as specified in § 68.190(b) and submit it in the method and format to the central point specified by EPA as of the date of submission.

k. RMP Registration

38. Section 68.160(b)(6) of CAPP provides that the completed registration form for the RMP shall include updated emergency contact information.

Statement of Facts and Explanation of Violations

a. Applicability

- 39. The La Salle City Water Works treats and chlorinates water at its water treatment plant (the Facility) at 234 Union Street, La Salle, Illinois.
- 40. The Facility maintains a maximum inventory of 6,000 pounds of chlorine as a liquified compressed gas in 1-ton cylinders.
- 41. The Facility is subject to requirements of Chemical Accident Prevention Provisions in accordance with 40 C.F.R. § 68.10(a) and the requirements of Program 3 in accordance with 40 C.F.R. § 68.10(i).
 - 42. On July 30, 2019, EPA conducted an announced inspection of the Facility.
- 43. The Facility provided numerous documents for the July 30, 2019 inspection. These documents were related to various aspects of its Program 3 RMP including: hazard assessment, the Program 3 prevention program, and the RMP.

b. Hazard Assessment

- 44. The Facility failed to estimate the residential population potentially affected by the offsite impacts, in violation of 40 C.F.R. § 68.30.
- 45. The Facility failed to list the RMP environmental receptors, in violation of 40 C.F.R. § 68.33.
- 46. The Facility failed to review and update the offsite consequence analyses at least once every five years, in violation of 40 C.F.R. § 68.36(a).
- 47. The Facility failed to revise and document the worst-case release scenario, alternate release scenario, and supporting information in the RMP, in violation of 40 C.F.R. § 68.39.

c. Process Safety Information

48. The Facility failed to create a block flow diagram or simplified process flow diagram of the chlorine process; document the safe and lower limits for such items as temperatures, pressures, flows, or compositions; and evaluate and document the consequences of deviation, in violation of 40 C.F.R. § 68.65(c)(1)(i, iv, v).

- 49. The Facility failed to update the P&ID's and compile written information on the materials of construction, electrical classification of the equipment in the chlorine system, the relief system design and design basis, ventilation system design, design codes and standards employed, and safety systems. These are violations of 40 C.F.R. § 68.65(d)(1)(i-vi, viii).
- 50. The Facility failed to document that the equipment in the chlorine system complies with the recognized and generally accepted good engineering practices, in violation of 40 C.F.R. § 68.65(d)(2).

d. Process Hazard Analysis

- 51. The Facility failed to conduct, nor update, revalidate, and retain records of, an initial process hazard analysis, due in June 2004, that includes: [1] factors listed in § 68.67(c)(1-7), [2] the involvement of a team with the appropriate technical background; and [3] a system to address, document, and communicate the timely resolution of the team's findings and recommendations. These are violations of 40 C.F.R. § 68.67(a, c-g).
- 52. The Facility failed to use one or more of the methodologies, listed in § 68.67(b)(1-7), to determine and evaluate hazards of processes subject to Program 3, in violation of 40 C.F.R. § 68.67(b).

e. Operating Procedures

- 53. The Facility failed to develop written operating procedures for handling, storing, receiving, and hooking up chlorine cylinders that addresses the following: [a] the following operating phases emergency shutdown (including the conditions under which emergency shutdown is required), emergency operations, normal shutdown, and startup following a turnaround or after emergency shutdown; [b] operating limit deviations; [c] safety and health considerations; [d] safety systems and their functions, such as chlorine sensor operation; [e] inventory amounts; and [f] checks on the chlorine cylinders hydrotest dates when the cylinders are received. These are violations of 40 C.F.R. §§ 68.69(a)(1)(iv-vii) and (a)(2-4).
- 54. The Facility failed to certify annually that the operating procedures are current and accurate, in violation of 40 C.F.R. § 68.69(c).

f. Training

55. The Facility failed to document training provided to one of the three full-time operators involved in operating processes subject to Program 3 and to provide refresher training to two of operators on the current operating procedures, in violation of 40 C.F.R. § 68.71.

g. Mechanical Integrity

- 56. The Facility failed to establish and implement written procedures to maintain the ongoing integrity of process equipment, in violation of 40 C.F.R. § 68.73(b).
- 57. The Facility failed to train each employee involved in maintaining the on-going integrity of process equipment, in violation of 40 C.F.R. § 68.73(c).
- 58. The Facility's inspections and tests were not performed on process equipment, documented, nor performed according to recognized and generally accepted good engineering practices

at a frequency consistent with applicable manufacturers' recommendations and good engineering practices. These are violations of 40 C.F.R. § 68.73(d).

h. Compliance Audits

59. The Facility has never conducted a compliance audit, which was first due in June 2002, and is a violation of 40 C.F.R. § 68.79.

i. Employee Participation

- 60. The Facility failed to develop an employee participation plan to implement employee participation, such as in the development of process hazard analyses and process safety management, in violation of 40 C.F.R. § 68.83(a, b).
- 61. The Facility failed to provide to employees and their representatives access to information required under CAPP, in violation of 40 C.F.R. § 68.83(c).

j. RMP Updates

62. The Facility failed to revise and submit a five-year RMP update to the RMP Reporting Center since the initial RMP submission on June 22, 1999, in violation of 40 C.F.R. § 68.190(a).

k. RMP Registration

63. The Facility failed to submit a registration form to update the emergency contact information, which changed in March 2016, in violation of 40 C.F.R. § 68.160(a)(6).

1. Violations of the Clean Air Act

64. Pursuant to Section 112(r)(7)(E) of the Act, the above-described violations of the regulations and requirements of 40 C.F.R. Part 68, are violations of the Act.

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division

CERTIFICATE OF ELECTRONIC MAILING

I certify that I sent a Finding of Violation, No. EPA-5-21-IL-08, by electronic mail, Delivery Receipt Requested, to:

Jeff Bumgarner Superintendent/Director of Public Works City of La Salle 745 Second Street La Salle, Illinois 61301 J.Bumgarner@LaSalle-IL.gov

I also certify that I sent copies of the Finding of Violation by electronic mail to:

Kent Mohr, Manager Compliance Section Bureau of Air Illinois Environmental Protection Agency Kent.Mohr@Illinois.gov

Vicky Mei Environmental Engineer AECAB, IL/IN